

3. EARLIER CENSUSES OF MINERAL INDUSTRIES

The 1963 Census of Mineral Industries is the 15th such census of the United States. The first minerals census covered the year 1840. Such censuses have been conducted for the intervening years: 1850, 1860, 1870, 1880, 1889, 1902, 1909, 1919, 1929, 1935, 1939, 1954, and 1958. Present legislation provides for a census of mineral industries to cover the year 1967 and every fifth year thereafter.

The scope and quality of the minerals censuses have varied. While many of the problems and concepts involved in such a census were recognized early, the difficulties of locating mineral operators and the meager records often maintained impaired the quality of the first few censuses. Beginning with 1880, however, fairly comparable statistics have been available. The most comprehensive previous censuses are those covering the years 1880, 1889, 1902, 1909, 1919, 1939, 1954, and 1958.

For 1963, as in previous years, most of the basic inquiries were common to the censuses of mineral industries and manufactures. The statistics published for mineral industries are generally comparable with those published for manufacturing industries, although in somewhat greater detail.

4. DEFINITION OF MINERAL INDUSTRIES

The mineral industries include all establishments primarily engaged in mining. This term is used in the broad sense to include the extraction of minerals occurring naturally: Solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is also used in the broad sense to include quarrying, well operation, milling (crushing,

screening, washing, flotation, etc.), and other preparation and beneficiating needed to render the mineral marketable. Exploration is included as is the development of mineral properties. Services performed on a contract, fee, or other basis in the development of mineral properties are classified separately within this division.

Mining operations are classified by industry on the basis of the principal mineral produced or, if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The recovery of material from culm banks, ore dumps, and other waste minerals piles is classified in the appropriate mining industry according to the mineral product recovered.

Mineral preparation plants are usually operated together with mines or quarries and frequently no separate records for them are maintained. All such preparation plants are included in the scope of the minerals census. In general, separately operated preparation plants, whether they process minerals for the account of the operator or on a custom or toll basis for others, are also included in the minerals census. Coal cleaning and sizing plants operated at mines or as separate establishments are also included. However, crushing, grinding, and other treatment of certain non-metallic minerals at separately operated plants is included in the manufacturing industries.

Contract hauling (except out of open-pits in conjunction with mining) is excluded from the mineral industries.

Statistics on mining operations which are carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mix concrete plants) are not within the scope of this census. However, certain information on these operations has been obtained in the census of manufactures and is included in some of the summary and industry reports and in the State reports. Wherever such inclusion occurs, it is clearly specified.

All blast furnaces; metal smelters; metal and petroleum refineries; plants manufacturing cement, brick, tile, and pottery; and plants engaged in dressing or polishing stone are classified in the manufacturing industries. Separate reports were obtained and included in the minerals census for the few ore-dressing plants operated in conjunction with smelters and for the few natural gas liquids recovery plants operated as parts of chemical establishments.

5. THE STANDARD INDUSTRIAL CLASSIFICATION

The specific industry coding and grouping in the 1963 Census of Mineral Industries follows the structure of the Standard Industrial Classification Manual (SIC), published by the Bureau of the Budget.

This manual, which is a classification structure for the entire national economy, was first issued in 1939. In the mining sector, the manual built upon the mining industry classifications developed over the years in connection with the census of mineral industries. The SIC is intended for use in classifying establishments by type of activity in which

they are engaged in order to facilitate the collection, tabulation, and publication of figures relating to establishments and to promote uniformity and comparability in the presentation of statistics. It is used by all Federal statistical agencies, by most State agencies, and by many trade associations, research organizations, and others.

There is no other industrial classification system in widespread use, nor is there any other general-purpose system described in detail in official manuals or other published documents. Awareness of the SIC by business analysts, executives, statisticians, research scholars, and others has grown rapidly and will continue to increase, particularly in view of the adaptability of the decimal numeric system in mechanical processing.

The SIC divides all activities into broad industrial divisions (manufacturing, mining, retail, agriculture, etc.). It further subdivides each division into major industry groups, then into industry groups, and finally into detailed industries. The numbering system provides flexibility, permitting use of classification at various levels of detail according to the specific needs and uses desired. Employing a decimal system of coding, the Major Industry Group is assigned two digits (Major